

Notice of Allowability	Application No.	Applicant(s)	
	09/689,902	SOGA, KENJI	
	Examiner	Art Unit	
	Thomas Duong	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to December 13, 2004.
2. ☒ The allowed claim(s) is/are 1-5.
3. ☒ The drawings filed on October 13, 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

1. The Applicants' arguments and amendments filed on October 20, 2004 have been fully considered and are persuasive.

Allowable Subject Matter

2. *Claims 1-5* are allowed. The claims indicated include limitations that the prior arts of record do not appear to teach or render obvious, hence they are allowed.
3. Presented is the independent *claim 1* which includes the allowable subject matter discussed below.

A method for structured communication routes, in which plural designing tree-ingress nodes, a single common egress node, plural connection nodes situated between said plural ingress nodes and said single common egress node, comprising the sequential steps of:

- *determining a set of plural routes starting from each of said plural ingress nodes, via said plural connection nodes, to said common egress node;*
- *determining whether a first condition that any node, except said egress node, in a selected route successively selected from said set of plural routes, does not appear on another route, is satisfied, and when the first condition is satisfied, adding a predetermined point to a score of the route;*

Art Unit: 2145

- *determining whether a second condition that, when there is a common node, in addition to said common egress node, which appears in both said selected route and said another route, and said selected route agrees with said another route from said common node to said common egress node, is satisfied, and when the second condition is satisfied, adding the predetermined point to the score of the route successively selected from said set of plural routes;*
- *successively selecting said routes in reverse order of said scores of said routes;*
- *respectively generating a first tree, extending from at least two of said plural ingress nodes to said common egress node, from said route with a lowest score and said other routes based on shared routings, along said route and said other routes, to the common egress nodes; and*
- *successively generating other trees, extending from at least one of said plural ingress nodes to said common egress node, from said other routes which are unable to generate said first tree, based on shared routings along said other routes to the common egress nodes.*

4. The following is an examiner's statement of reasons for allowance:

As presented in the previous office action, Bartolanzo, Jr. reference (US005321815) discloses a *networking environment where a plurality of routes from the originating nodes to a destination network node are determined and, from these plurality of routes, an optimized routing tree is built by adding together the individual nodes or other routes.* However, the prior arts of record fail to teach or suggest individually or in combination as stated in the independent claims for *"determining whether a first condition that any node, except said egress node, in a selected route successively selected from said set of*

Art Unit: 2145

plural routes, does not appear on another route, is satisfied" and "determining whether a second condition that, when there is a common node, in addition to said common egress node, which appears in both said selected route and said another route, and said selected route agrees with said another route from said common node to said common egress node, is satisfied" and, if so, "adding a predetermined point to a score of the route", and in combination with other limitations as set forth in the independent claims.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone numbers for the organization where this application or proceeding is assigned are 703/872-9306 for regular communications and 703/872-9306 for After Final communications.

Thomas Duong (AU2145)

April 15, 2005


VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2